

Amphibole Thermobarometers

Reference	Name in Thermobar	T-dependent?	P-dependent?	H ₂ O-dependent?
Amphibole-Liquid Barometry. Function “calculate_amp_liq_press”				
Putirka (2016)	P_Put2016_eq7a	X		✓
	P_Put2016_eq7b	X		✓*
	P_Put2016_eq7c	X		✓*
Amphibole-Liquid Thermometry. Function “calculate_amp_liq_temp”				
Putirka (2016)	T_Put2016_eq4b		X	✓
	T_Put2016_eq4a_amp_sat		X	✓*
	T_Put2016_eq9		X	✓*
Amphibole-only Barometry. Function “calculate_amp_only_press”				
Ridolfi and Renzulli (2012)	P_Ridolfi2012_1a	X		X
	P_Ridolfi2012_1b	X		X
	P_Ridolfi2012_1c	X		X
	P_Ridolfi2012_1d	X		X
	P_Ridolfi2012_1e	X		X
Ridolfi et al. (2010)	P_Ridolfi2010	X		X
Hammerstrom & Zen (1986)	P_Hammerstrom1986_eq1	X		X
	P_Hammerstrom1986_eq2	X		X
	P_Hammerstrom1986_eq3	X		X
Hollister et al. (1987)	P_Hollister1987	X		X
Johnson & Rutherford (1989)	P_Johnson1989	X		X
Blundy et al. (1990)	P_Blundy1990	X		X
Schmidt (1992)	P_Schmidt1992	X		X
Anderson & Smith, 1995	P_Anderson1995	✓		X
Krawczynski et al.(2012)	P_Kraw2012	X		X
Amphibole-only Thermometry. Function “calculate_amp_only_temp”				
Putirka (2016)	T_Put2016_eq5		X	X
	T_Put2016_eq6		X	X
	T_Put2016_SiHbl		X	X
	T_Put2016_eq8		✓	X
Ridolfi and Renzuli, 2012	T_Ridolfi2012		✓	X
✓* H ₂ O-dependence because of parameterization in terms of hydrous fractions, not a specific H ₂ O-term				
Other Functions				
calculate_amp_liq_press_temp: Iteratively solves P and T for liquid-amphibole pairs using an equation for pressure, and an equation for temperature.				
calculate_amp_only_press_temp: Iteratively solves P and T for amphibole compositions using an equation for pressure, and an equation for temperature.				